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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/567,932	12/08/2006	Heinrich Marti	HM-711PCT	4562
40570	7590	06/15/2009	EXAMINER	
FRIEDRICH KUEFFNER 317 MADISON AVENUE, SUITE 910 NEW YORK, NY 10017				KERNs, KEVIN P
ART UNIT		PAPER NUMBER		
1793				
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06/15/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/567,932	MARTI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Kevin P. Kerns	1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 10 February 2006 and 08 December 2006.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-13 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-13 is/are rejected.  
 7) Claim(s) 13 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 10 February 2006 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date <u>2/10/06</u> .	6) <input type="checkbox"/> Other: _____ .

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "20" (see the 6<sup>th</sup> line on page 6 of the specification). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
  
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: "18" (see Figures 1 and 3). Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the

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filings date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

In this instance, the abstract is not on a separate sheet (the abstract is only a minor portion of the front page of WO 2005/018843 A1), includes "The invention (also) relates to" (phrases that can be implied), and recites the legal terms "said" and "means".

4. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

### ***Arrangement of the Specification***

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A “Sequence Listing” is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required “Sequence Listing” is not submitted as an electronic document on compact disc).

In this instance, the specification lacks section headings.

### ***Claim Objections***

5. Claim 13 is objected to because of the following informalities: in the 1<sup>st</sup> line of the claim, it is believed that “for carrying out the method” should be added after “installation” to be in agreement with similar language of claim 6. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949).

In the present instance, claims 1 and 6 recite the broad recitation "at least one rolling unit", and the claims also recite "preferably two successive rolling units" which is the narrower statement of the range/limitation.

Claim 1 recites the limitation "the casting cycle" in the 1<sup>st</sup> line. There is insufficient antecedent basis for this limitation in the claim. In this instance, it is suggested to replace "the" with "a" to obtain proper antecedent basis.

Claims 2 and 3 recite the limitation "the roll change". There is insufficient antecedent basis for this limitation in the claims. In both instances, it is suggested to replace "the" with "a" to obtain proper antecedent basis.

Claim 4 recites the limitation "the given strip thickness". There is insufficient antecedent basis for this limitation in the claim. In this instance, it is suggested to replace "the" with "a" to obtain proper antecedent basis.

Claim 5 recites the limitation "the casting process parameters". There is insufficient antecedent basis for this limitation in the claim. In this instance, it is suggested to delete the term "the" to obtain proper antecedent basis.

Claim 5 recites the limitation "the liquid steel supply". There is insufficient antecedent basis for this limitation in the claim. In this instance, it is suggested to replace "the" with "a" to obtain proper antecedent basis.

With regard to claim 6, the phrase "can be" is indefinite, as "can be" recites optional functions of being "changed", "lifted", and "laterally extracted". It is suggested to replace "can be" with "are" to more distinctly define these limitations in the claim.

With regard to claims 7 and 9, the phrase "can be" is indefinite, as "can be" recites an optional function of being "lifted". It is suggested to replace "can be" with "are" to more distinctly define this limitation in the claims.

Claim 8 recites the limitation "the free ends". There is insufficient antecedent basis for this limitation in the claim. In this instance, it is suggested to delete the term "the" to obtain proper antecedent basis.

With regard to claim 10, the phrase “can be” is indefinite, as “can be” recites optional functions of being “supported” and “swung”. It is suggested to replace “can be” with “are” to more distinctly define these limitations in the claim.

With regard to claim 10, the phrase “can move” is indefinite, as “can move” recites an optional function of “moving”. It is suggested to replace “can move” with “move” to more distinctly define this limitation in the claim.

With regard to claims 11 and 12, the phrase “can be” is indefinite, as “can be” recites an optional function of being “changed”. It is suggested to replace “can be” with “are” to more distinctly define this limitation in the claims.

With regard to claim 13, the phrase “can be” is indefinite, as “can be” recites optional functions of being “lifted” and “lowered”. It is suggested to replace “can be” with “are” to more distinctly define these limitations in the claim.

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 1-13 insofar as definite (in view of the 35 USC 112, 2<sup>nd</sup> paragraph rejections, and in the absence of a complete translation of the German document) are rejected under 35 U.S.C. 103(a) as being unpatentable over DE 101 63 373 (cited in the applicants' IDS of 2/10/06, with an abstract provided with this Office Action).

Regarding claims 1 and 6, DE 101 63 373 discloses a method and installation for changing the working rollers in a roll stand (abstract; paragraphs [0030]-[0041] of German text; and Figures 1-3), in which the method and installation include arranging an upper supporting roller in a dismantling position below the maximum lifting position to drive the working roller set together with the lower supporting roller, such that the method further includes changing the working rollers 3 above and below the steel strip. DE '373 does not specifically disclose that the rollers are being extracted laterally from the unit during casting.

As shown in Figures 1-3, DE '373 shows only one roll stand. However, there would be (inherently in every casting installation) a plurality of roll stands with working rollers, in order to obtain uniform rolling of the steel strip. Furthermore, since many of these roll stands periodically break down, one or more of the roll stands would need to be replaced without disturbing the casting and rolling processes. DE '373 does not

explicitly disclose that the working roller is *laterally extracted* during the casting process. However, this is the only obvious direction where the working rollers can be removed from the roll stand. In the abstract of DE '373, it is disclosed that the working roller is dismantled "below the maximum lifting position". Therefore, the working roller is on top of the steel strip and would be obvious to be extracted laterally.

Regarding claims 2-5, it would have been obvious, during the changing of one roll stand, to have other roll stands perform the normal routine of maintaining strip thickness, casting rate, bath level, and/or heat dissipation, as one of ordinary skill in the art would have recognized, in order to optimize casting efficiency.

Regarding claims 7-13, DE '373 discloses that the work rolls 3 can be lifted by a lifting device. Furthermore, it is inherent in every rolling mill to have lifting rolls and pivoted levers. Also, the working rolls 3 are supported on guides as shown in Figures 1-3. As further shown in Figures 1-3, the working rolls can be changed in pairs and can be lifted together with backup rolls 5 (also see abstract).

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicants' disclosure. US 4,362,206 and US 4,411,053 are also cited in PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin P. Kerns whose telephone number is (571)272-1178. The examiner can normally be reached on Monday-Friday from 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jessica Ward can be reached on (571) 272-1223. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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June 12, 2009